ANNEX E

COMMENTS AND RESPONSES TO THE DRAFT EIS JULY 1999

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City of Pahokee
171 North Lake Avenue
Pahokee, Florida 33476

Comment: We reviewed the rehabilitation report for the dike as it affects Pahokee. Our concerns are limited to some specific sites that may be impacted by the project. One in particular is the City's water plant. The tanks may be within the 50 feet that is proposed for the rehab. However, I believe there is sufficient room to do what is proposed with minor modifications.

Response: The Corps has modified the plan with the current recommended alternative. Impacts to the water treatment plant will be avoided.

Southwest Florida Regional Planning Council
4980 Bayline Drive North
Fort Myers, Florida 333917-3909

Comment: The Council reviewed the DEIS and found it to be "Regionally Significant and Consistent" with adopted goals, objectives and policies of the Strategic Regional Policy Plan.

Response: No response needed.

South Florida Regional Planning Council
3440 Hollywood Boulevard, Suite 140
Hollywood, Florida 33201

Comment: The review of the DEIS as proposed, is generally consistent with the goals and policies of the Strategic Regional Planning Policy Plan for South Florida.

Response: No response needed.

South Florida Water Management District
3301 Gun Club Road
West Palm Beach, Florida 33406

General Comments

Comment No. 1: Why was the Herbert Hoover Dike segmented into reaches and what criteria was used?

Response: The Herbert Hoover Dike (HHD) was divided into reaches based on hydrology and hydraulics, geology, population and perceived conditions at the time. For example, the limits of Reach One were based on the limits of inundated cells, similar geology (3 cells in Reach One), largest population in inundated cells, and at the time, it was thought that Reach One had the worst existing dike conditions.

Comment No. 2: How was Reach One selected as the first priority?

Response: The Herbert Hoover Dike (HHD) was divided into reaches based on hydrology and hydraulics, geology, population and perceived conditions at the time. For example, the limits of Reach One were based on the limits of inundated cells, similar geology (3 cells in Reach One), largest population in inundated cells, and at the time, it was thought that Reach One had the worst existing dike conditions.

Comment No. 3: What is the risk associated with rehabilitation of Reach One verses the remaining reaches?

Response: If Reach One is rehabilitated, the risk of failure for another reach does not increase. Systems reliability can be addressed as either series or parallel systems. HHD is a series system in which the performance of each component (reach) is independent of the others. An analogy is a chain. The links (reaches) all see the same load (lake level). Fixing a weak link does not cause another link to lose capacity. In fact, the overall capacity (reliability of the system) is increased.

Comment No. 4: If Reach One is rehabilitated, what is the risk of failure of another portion of the dike?

Response: If Reach One id rehabilitated, the risk of failure for another reach does not increase. Systems reliability can be addressed as either series or parallel systems. HHD is a series system in which the performance of each component (reach) is independent of the others. An analogy is a chain. The links (reaches) all see the same load (lake level). Fixing a weak link does not cause another link to lose capacity. In fact, the overall capacity (reliability of the system) is increased.

Comment No. 5: As a result, the impacts of the No Action Alternative are not equally compared with other alternatives. It is assumed that a failure will occur in Reach One

in the No Action Plan. However there is a risk that failure may occur in another Reach with No Action Alternative or other alternatives.

Response: Any engineered structure has a risk of failure. Defining the level of acceptable risk determines whether or not a structure is considered safe or unsafe. Probability of "failure", in this case catastrophic failure, is the product or the probability of a given lake elevation combined with the probability of unsatisfactory performance for a given reach. At higher lake levels, we (USACE) consider this risk to be unacceptable. We consider the "No Action alternative" unacceptable due to the proximity of populated areas and the potential for loss of life.

Comment No. 6: alternatives 1 through 3 do not eliminate the possibility of dike failure; it only reduces the risk of failure. It is this reduction in risk for Alternatives 1 through 3 that should be compared with the risk of failure associated with the No Action Alternative.

Response: "Eliminating" the possibility of failure is not possible in any structure. Reducing the risk to an acceptable level in the most economically and environmentally acceptable manner is our objective. Again, due to the life safety issues, the No Action Alternative is not acceptable.

Comment No. 7: Other than the No Action alternative, there are no non-structural alternatives considered. Operational alternatives should be addressed in the evaluation.

Response: Unfortunately, even if we were to substantially lower the Lake during a 100-year flood event, the water comes into the Lake much faster than we could remove it. The Lake level could still rise to an elevation that could result in a dike failure. Besides maintaining unusually low Lake levels or draining the Lake entirely would have significant socioeconomic and environmental consequences. Therefore, Lake levels must be maintained within reasonable levels.

Comment No. 8: Implementing one of the three alternatives alone may not optimize benefits. Each alternative is applicable in different areas. Therefore, a combination of three alternatives should be considered.

Response: Each Alternative was evaluated based on the particular problem in a particular area. All three alternatives were considered.

Specific Comments

Comment No. 1: DEIS page 3, Para. 1: Is there "continued degradation of the HHD's stability…? If so, there should be a discussion of what is happening and its potential implications.

Response: Degradation of stability is addressed in the technical portion of the MRR. Piping causes degradation of the structure and is discussed in detail in appendix H.

Comment No. 2: DEIS page 5, Para 3: While the sentence immediately before this paragraph states that the repairs and modifications are authorized by the Flood Control Act of 1948, will the requirements of local cooperation be based on the same authorization?

Response: The MRR, dated Nov 2000, page 77, Section 18. Cost Sharing, states: "...recent guidance from CECW-OM, dated 8 August 2000, states that the acquisition of required real estate interest be borne by the non-Federal sponsor and all additional costs be 100 percent Federal."

Comment No. 3: DEIS page 12, Para. 2: Recommend replacing the Fernald and Patton citation with a more recent one, which would reflect the most recent Lake regulation schedule. You could cite the 1997 SWIM Plan Update or perhaps, the WSE DEIS, if you feel comfortable with that.

Response: Replace the Fernald and Patton citation with "(Lake Okeechobee Regulation Schedule Study, Final Environmental Impact Statement, November 1999)".

Comment No. 4: DEIS page 14, Para. 3: It is not clear how flooding of perimeter wetlands amounts to a primary source of nutrients; advection of high nutrient water from open water to the littoral zone is a redistribution of existing nutrients, not a new source. Instead include atmospheric inputs via precipitation as additional source. Unfortunately, we still do not have good data quantifying the relative magnitude of this source. Also there is a typographic problem in the apparent bridge between this paragraph and the next one.
Response: The comment has been discussed and will be clarified in the water quality section of the final EIS.

Comment No. 5: DEIS page 14, Para 5: Disagree that the water in Lake Okeechobee is essentially uniform in chemical composition. There are considerable differences in

chemistry even within different regions of the open water, and certainly between waters in the open water and littoral zones.

Response: Agree with your opinion.

Comment No. 6: DEIS, page 15, Para 2: This paragraph suggests that water levels can be controlled between 17.5 and 15.5 ft HCVD. However, this is not true. Suggest a broader discussion of actual water level ranges that can be expected with the current and WSE regulation schedules.

Response: Rewrite this paragraph to read: "The Lake is regulated for multiple-use purposes such as flood control, water supply, regional groundwater control, enhancement of fish and wildlife, navigation and recreation. The guidelines for the management of Lake water levels are a regulation schedule that was developed by the South Florida Water Management District (SFWMD) and USACE. The schedule was developed to provide seasonal Lake fluctuations that attempt to lower the Lake stage prior to the wet season to provide both storage capacity and flood protection for the surrounding areas during the wet season. After the peak of the hurricane season, Lake levels area allowed to increase to store water for the upcoming dry season. The Caloosahatchee River and the St. Lucie Canal are the primary outlets for release of flood water when the Lake is above regulation stages. The Corps of Engineers is ultimately responsible for prescribing regulations and key operating criteria for all project works. Any operational activity must be consistent with the Corp's water management plan. (See Appendix I, Hydrology and Hydraulics analysis, Herbert Hoover Dike Major Rehabilitation Evaluation Report, December 1998, for information on the frequency of Lake levels and how they were determined.)"

Comment No. 7: DEIS page 16, Para 4: The term "duration" is used where the term "return frequency" should be used and vice versa.

Response: Concur, it will be corrected.

Comment No. 8: DEIS, page 19, Para 2: Change "Vallioneria" to Vallisneria". Also, suggest steering clear of the term "diverse" to describe these marshes, unless you want to get into a discussion of what diverse means. The marshes in Lake Okeechobee actually were not very diverse, at least prior to human impact. Whatever diversity they have obtained recently is a perversion due to invasive species; it is doubtful that this is how we want to increase diversity.

Response: Concur.

Comment No. 9: DEIS, page 21, Para 4: The Latin species name for the Florida apple snail is unfamiliar, and not consistent with the one used by SFWMD (Pomacea paludosa).

Response: Concur, change to (Pomacea paludosa).

Comment No. 10: DEIS, Page 24: Given that there is now an alligator hunting season (permits given by lottery only), parts of this section seem incongruous. Perhaps this should be rewritten.

Response: Add this sentence to 3rd paragraph on page 24: Alligator hunting permits are issued by lottery only during Alligator hunting season.

Comment No. 11: DEIS, page 26, Para 2: The basis for the statement that wood storks are an excellent indicators of wetland health when the habitat is not clear. They are frequently found in South Florida on golf courses.

Response: The author is saying that the wood stork is an indicator species associated with wetlands. The author also stated that wood storks feed in shallow ponds, tidal pools etc that area also found in many golf courses.

Comment No. 12: DEIS, page 50, Para 2: It is not clear what type of water quality issues might be perceived.

Response: Since the modified recommended alternative avoids impacts to isolated wetlands, there are no water quality issues with the present plan. Some temporary construction impacts (disturbed sediments) will occur during the dike rehabilitation. These temporary impacts would end with the completion of the construction.

Comment No 13. DEIS, page 52, Para 1: If a breach were to occur, and massive discharges ensued, it is likely that the fluid mud sediments near the center of the Lake would laterally transported to the near shore region close to the breach. This would result in elevated Total Suspended Solids as well as elevated Total Phosphorus concentrations, near this region as well.

Response: Agree, a levee breach would likely result in significant sediment transport with resulting in elevated levels of sediment components in the water column.

Comment No. 14: DEIS, page 52, Para 1: It is true that a breach of the dike is likely to be preceded by significant freshwater discharges to the estuaries with the No Action Alternative. However, this is equally true for the other alternatives. Discharges to the estuaries are determined by the regulation schedule, which is common to all alternatives.

Response: Concur.

Comment No 15. DEIS, page 73, Para 6: Although the impacts of the failures might be contained in separated watersheds, the risk of failure changes as each reach is rehabilitated. For example, rehabilitation of Reach One may actually increase the risk of a failure in another reach.

Response: Again, performances of Reaches (links) are independent of each other. Repairing Reach One lowers its risk of failure and INCREASES overall system reliability. The other reaches still have the SAME probability of failure, only now Reach One is much LESS likely to fail.

Comment No. 16: DEIS, page 73, Para 6: The impacts of the proposed regulation schedule WSE should be assessed. Also the impacts of implementation of Restudy Comprehensive Plan components that will attenuate inflows to the Lake must also be considered in the cumulative effects section.

Response: WSE, the new regulation schedule, should have limited impact on the Herbert Hoover Dike System. For example, for the former schedule, Run 25, the peak 100-year flood elevation on Lake Okeechobee was 21.3 feet. For Run 22D, a schedule similar to WSE, the 100-year flood elevation would be 20.5 feet. This is a beneficial change that reduces the lake stage and corresponding likelihood of failure associated with a 100-foot Year flood on the Lake. But the extent of reduction in stages and failure likelihood is not adequate. An unacceptable risk of dike failure would still exist at the lowered stage of 20.5 feet. A regulation schedule that resulted in extremely low lake levels, or draining the Lake entirely, would have catastrophic socio-economic and environmental consequences. (See Herbert Hoover Dike Major Rehabilitation Evaluation Report, (HDDMRER) December 1998).

The intent of the HHD MRR is to ensure that a reliable levee system is provided along the perimeter of Lake Okeechobee. The Restudy Comprehensive Plan components should benefit the Lake in many more ways, some of which follow.

The storage reservoirs will detain water during wet periods for later use during dry periods and reduce nutrient loads flowing to the lower Kissimmee River and Lake Okeechobee. This increased storage capacity should reduce the duration and frequency of both high and low water levels in the Lake. These facilities could be designated to achieve significant water quality improvements, depending on location. The watershed water quality treatment facilities will be designed to attenuate peak flows and retain phosphorus before it enters the Lake. The aquifer storage and recovery wells should provide additional regional storage, and increase the Lake's water storage capability to better meet regional water supply demands for agriculture, Lower East Coast urban areas, and the Everglades. They should also reduce harmful regulatory discharges to the St. Lucie Canal and Caloosahatchee Estuaries and maintain and enhance the existing level of flood protection.

State of Florida Clearinghouse
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, Florida 332399-2100

Comment: The letter provides consolidated State review comments on the DEIS.

Response: No response needed.

(1) Division of Forestry
Forest Resources planning Council & Support Services Bureau
3125 Conner Blvd., MS C23
Tallahassee, Florida 32399-1650

Comment: No comment

Response: No response needed

(2) Office of Environmental Services
Florida Fish and Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, Florida 32399-1600

Comment: No comment

Response: No response needed.

(3) Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Comment: The project will require a water quality certification under Chapter 373, F.S. and Section 402 of the Clean Water Act.

Response: Agree the Corps will coordinate with the Department's Federal Liaison concerning application requirements.

(4) Florida Department of State
Division of Historic Resources
500 South Bronough Street
Tallahassee, Florida 32399

Comment: The department noted the HHD is eligible for listing the National Register of Historic Places. However, it has concurred with the determination that the proposed plan will have no adverse effect to the eligible resource.

Response: The USACE had noted the Herbert Hoover Dike is eligible for listing in the National Register of Historic Places. However, both the USACE and SHPO are in concurrence the proposed project will have no adverse effect on the historic character of the Herbert Hoover Dike.

(5) Florida Department of Transportation
Transportation Planning Office – District 4
3400 West Commercial Blvd., 3rd Floor
Ft. Lauderdale, Florida 33309-3421

Comment: The Department recommends that the U.S. Army Corps of Engineers coordinate with FDOT and the Florida Department of Environmental Protection on the implementation of the Lake Okeechobee Scenic Trail Master Plan.

Response: The U.S. Army Corps of Engineers is coordinating all work with your suggested point of contact.

(6) Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, Florida 34994

Comment: No comment.

Response: No response needed.

(7) Southwest Florida Regional Planning Council
4980 Bayline Drive North
Fort Myers, Florida 333917
Glades County

Comment: No comment

Response: No response needed.

United States Environmental Protection Agency
Region 4
Atlanta Federal Center
612 Forsyth Street
Atlanta, Georgia 30303-8960

General comment: From the information provided, it appears that the proposed design option will meet the primary objective, viz, preventing a catastrophic dike failure within Reach #1. On the basis of our review a rating of EC-2 has been assigned.

Response: No response needed.

Detailed Comment (1): There should be some consideration given to compensate for the infrastructure losses experienced by the local public in the immediate project area.

Response: We concur that this issue along with many others are important and will be addressed during the detailed design process when total real estate needs are known.

Detailed Comment (2): The fate of the peat which will be excavated during the construction of the seepage berm should be noted.

Response: Peat will be stockpiled for use on areas of the dike where sterile soils exist.

Detailed Comment (3): We observe that fill will have to be transported to the abandoned rock quarry (vicinity C-12) in order to support the drainage berm. It would be helpful if the final document provided more details on the specifics of this design element. In this instance it appears that comprehensive sediment control is fundamental to the long-term maintenance of dike integrity and by extension the expected degree of flood damage prevention.

Response: The repair in the MRR is a concept design. We concur that sediment control (and many other items) will need to be addressed during the design process. Once final design is approved and funded these items can then be addressed.

Detailed Comment (4): It has been our experience that the protective grates over the drop openings are very prone to clogging, especially after mowing operations. Some information as to their maintenance should also be provided in the final document. For example, what criteria/standards will be used by the District or its agents in providing controls?

Response: The recommended alternative has been modified to not include the drop structures in question. However, the U.S. Army Corps of Engineers Guide Specification number 01570, Erosion Control and Pest Control, addresses these types of concerns. The project quality assurance plan will include these specifications.

Detailed Comment (5): It was noted that during periods of concentrated rain and/or backpumping from adjacent agricultural fields the usual situation reverses and flows in the canal move toward the Lake in some portions (vicinity of C-12 and C-13) of Reach #1 rather than vice versa. When this occurs the seepage channel will not function as designed because of this differential head. Any loss of efficiency is important as this would seem to be exactly the times when the seepage canal would be most needed. We understand that this situation can be rectified via some rerouting of the culvert system. The final document should provide details on exactly how this will be accomplished.

Response: The revised recommended alternative takes into account the differential encountered in the above comment as the worst case scenario for head differential and highest seepage rates. The new design does not increase total flow at higher head differentials.

Detailed Comment (6): There is a quarry within Reach #1 which may pose some problems in achieving/maintaining project objectives. It will have to be partially filled because of insufficient space to construct the proposed drainage berm between its

margins and the existing embankment toe of the levee. This fill must be carefully chosen to ensure that it has the proper structural/textural characteristics. Namely, it would need acceptable shrink-swell characteristics to nominalize the potential for failure of the culvert line at its joints. We are also concerned about the gross integrity of the fill on which the drainage berm will be placed. Unless there is essentially a waterproof seal between the drain and the quarry, this fill would be subject to excessive wetting which could foster slumping. This could be true notwithstanding the rock-filled gabions placed on the margins of the project and the quarry and the premise the water levels in the quarry will remain lower than the elevations of the culvert system. Unless this seal is maintained over the life of the project and quarry drains remain open, the water in the quarry could approximate that in the drain and lessen its efficacy at exactly the time (rain fall periods) that it must have maximum utility in maintaining HHD integrity. In a related matter, if the quarry will only be partially filled, there would appear to be the opportunity to construct a shallow littoral zone to provide wildlife and water quality functions. We would strongly support adding this feature to the project.

Response: Concur. Structural fill will be specified so that the desired properties are achieved. This will take place during the final design.

Detailed Comment (7): Perennial vegetation must be scrupulously prevented from growing on the elevated berm to preclude root penetration/clogging of the perforated drainage (culvert) line. The current practice of regular mowing will accomplish this end, but care will have to be taken that the weight of the equipment does not adversely affect the efficacy of the drainage system by compaction and /to tearing the geotextile fabric which surrounds the culvert.

Response: Due diligence will be utilized to ensure the maintenance of the dike slopes will not adversely affect drainage structures critical to the performance of the dike

Detailed Comment (8): While the analysis of upgrading HHD is on-going, this would be an excellent opportunity to compare the overall water quality ramifications of agricultural waterward of the dike verses the economic benefits of this land.

Response: There is no known agriculture waterward of the HHD. However, if it does exist waterward of the levee it would be useful to evaluate the resultant nutrient loading/water quality impacts of that agriculture. Unfortunately there is no mechanism authorized to undertake a study of that nature under the auspices of the Herbert Hoover Dike Major Rehabilitation Report Reach One study.

United State Department Of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southeast Regional Office
9721 Executive Center Drive North
St. Petersburg, Florida 33702

Comment: The DEIS does not sufficiently explain the effects the seepage berm will have on downstream water quality; therefore, NMFS can not make a determination on this project's effects on Johnson's seagrass.

Response: This issue was answered with a letter dated September 16, 1999 from NMFS.

United State Department Of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southeast Regional Office
9721 Executive Center Drive North
St. Petersburg, Florida 33702

Comment: The information in your letter stated that to minimize temporary water quality due to construction, all Corps of Engineers contractors will follow a rigorous environmental protection plan. This plan will require the use of various erosion control measures. Based on this information, NMFS concurs with your conclusion that this project is not likely to affect species protected by the National Species Act under NMFS purview.

Response: No response needed.

United States Department of the Interior
Office Of The Secretary
Office of Environmental Policy And Compliance
Richard B. Russell Federal Building
75 Spring Street, S.W.
Atlanta, Georgia 30303

Comment (1): The Draft EIS is inconsistent in its evaluation of the impact of the project on wetlands along the existing toe ditch on the landward side of Herbert Hoover Dike

(HHD) (Section 4.09, pg DEIS-19, Section 5.09, pg DEIS-55, pg DEIS-55, Contrast: Section 5.10, pg DEIS-56, Section 5.21, pg DEIS-75).

Response: In February 2000, the U.S. Fish & Wildlife Service performed a Wetland Rapid Assessment Procedure (WRAP) on reach One (22-mile long section) and outlined a compensatory wetland mitigation plan for this section of the Herbert Hoover Dike. A mitigation plan for identified wetlands that would be affected by the project was developed and agreements documented in the final Fish and Wildlife Coordination Act Report dated December 20, 2001. The recommended plan was further refined and detailed in 30% design document. The refined plan eliminated work in the toe ditches and landward of the ditched that would have impacted wetland habitat. As a result, only temporary impacts to wetland habitat are anticipated. Mitigation work will not be required. This information is included in the Annex A of the Final EIS.

Comment (2): If the US Fish and Wildlife Service's (USFWS) wetland compensation recommendations for proposed littoral shelves in the existing quarry cannot be completed by the Corps, an alternative wetland compensation plan should be developed.

Response: See response to Comment No. 1.

Comment (3): The Service recommends use of the Wetland Rapid Assessment Procedure (WRAP) to perform an evaluation prior to detailed design of the project.

Response: See response to Comment No. 1.

Comment (4): The proposed WRAP assessment would provide a more suitable estimate of both the quantity and quality of the wetlands to be affected.

Response: See response to Comment No. 1.

CITY OF PAHOKEE

171 North Lake Avenue
Pahokee, Florida 33476
(561)-924-5534

August 11, 1999

Mr. James C. Duck
Chief Planning Division
Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

Re: Herbert Hoover Dike Rehabilitation

Dear Mr. Duck:

We reviewed the rehabilitation report for the dike as it affects Pahokee. Our concerns are limited to some specific sites that may be impacted by the project. One in particular is the City's water plant. The tanks may be within the 50 feet that is proposed for the rehab. However, I believe there is sufficient room to do what is proposed with minor modifications. I'm not sure of all the obstacles that may be adjacent to the toe ditch but they can be addressed on an individual basis during the design.

I appreciate the opportunity to review the report and in general concur with the selected alternative. If we can be of any assistance with this project please let me know.

Sincerely,

Kenneth N. Schenck
City Manager

KNS/dp

C: Greg Vaday, TCRPC

Southwest Florida Regional Planning Council

4980 Bayline Drive, 4th Floor, N. Ft. Myers, FL 33917-3909 (941) 656-7720

P.O. Box 3455, N. Ft. Myers, FL 33918-3455 SUNCOM 749-7720

FAX 941-656-7724

August 20, 1999

Mr. Mark Ziminske
USACOE - Jacksonville District
P.O. Box 4970
JACKSONVILLE, FL 32232-0019

RE: IC&R Project #99-337
State Clearinghouse #FL9501030002CR

USACOE - Jacksonville District - Draft EIS - The Herbert Hoover Dike - Major rehabilitation evaluation report - Lake Okeechobee, Florida.

Dear Mr. Ziminske:

The staff of the Southwest Florida Regional Planning Council reviews various proposals, Notifications of Intent, Preapplications, permit applications, and Environmental Impact Statements for compliance with regional goals, objectives, and policies, as determined by the Strategic Regional Policy Plan. The staff reviews such items in accordance with the Florida Intergovernmental Coordination and Review Process (Chapter 29I-5, F.A.C.), and adopted regional clearinghouse procedures.

These designations determine Council staff procedure in regards to the reviewed project. The four designations are:

Less Than Regionally Significant and Consistent no further review of the project can be expected from Council.

Less Than Regionally Significant and Inconsistent Council does not find the project of regional importance, but will note certain concerns as part of its continued monitoring for cumulative impact within the noted goal area.

Regionally Significant and Consistent project is of regional importance, and appears to be consistent with Regional goals, objectives, and policies.

Regionally Significant and Inconsistent project is of regional importance and does not appear to be consistent with Regional goals, objectives, and policies. Council will oppose the project as submitted, but is willing to participate in any efforts to modify the project to mitigate the concerns.

The above referenced document has been reviewed by this office, based on the information contained in the document, and on local knowledge, has been found **Regionally Significant and Consistent** with adopted goals, objectives, and policies of the Strategic Regional Policy Plan. Also, Regional staff supports the implementation of the Alternative 3 improvements to Reach 1.

Should you or any other party request this finding to be reconsidered, please contact Nichole L. Gwinnett, IC&R Coordinator, with this request, or any questions concerning staff review of this item. This recommendation will be discussed at the next scheduled Council meeting. Should Council action differ from the staff recommendation, you will be notified.

Sincerely,

SOUTHWEST FLORIDA REGIONAL PLANNING COUNCIL

for Wayne E. Daltry
Executive Director

WED/NLG

cc: Cherie Trainor, Florida State Clearinghouse

South
Florida
Regional
Planning
Council

September 3, 1999

Mr. James C. Duck
Chief, Planning Division
Department of the Army
Jacksonville District Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

RE: SFRPC #99-0813, Request for comments on the Draft Environmental Impact Statement for the Herbert Hoover Dike Major Rehabilitation Evaluation Report.

Dear Mr. Duck:

We have reviewed the above-referenced draft report and have the following comments:

- The Herbert Hoover Dike Major Rehabilitation, as proposed, is generally consistent with the goals and policies of the *Strategic Regional Policy Plan for South Florida*, particularly the following:

Strategic Regional Goal

3.8 Enhance and preserve natural system values of South Florida's shorelines, estuaries, benthic communities, fisheries, and associated habitats, including but not limited to, Florida Bay, Biscayne Bay and the coral reef tract.

Regional Policies

3.8.3 As a result of proposed project reviews, include conditions that result in a project that enhances and preserves marine and estuarine water quality by:

a) improving the timing and quality of freshwater inflows;
b) reducing turbidity, nutrient loading and bacterial loading from wastewater facilities, vessels;
c) the number of improperly maintained stormwater systems; and
d) requiring port facilities and marinas to implement hazardous materials spill plans.

3.8.4 Enhance and preserve commercial and sports fisheries through monitoring, research, best management practices for fish harvesting and protection of nursery habitat and include the resulting information in educational programs throughout the region. Identified nursery habitat shall be protected through the inclusion of suitable habitat protective features including, but not limited to:

a) avoidance of project impacts within habitat area;
b) replacement of habitat area impacted by proposed project; or
c) improvement of remaining habitat area within remainder of proposed project area.

3440 Hollywood Boulevard, Suite 140, Hollywood, Florida 33021
Broward (954) 985-4416, Area Codes 305, 407 and 561 (800) 985-4416
SunCom 473-4416, FAX (954) 985-4417, SunCom FAX 473-4417
e-mail sfadmin@sfrpc.com

3.8.5 Enhance and preserve habitat for endangered and threatened marine species by the preservation of identified endangered species habitat and populations. For threatened species or species of critical concern, on-site preservation will be required unless it is demonstrated that off-site mitigation will not adversely impact the viability or number of individuals of the species.

Strategic Regional Goal

3.9 Restore and protect the ecological values and functions of the Everglades System

Regional Policies

3.9.4 Restore natural volume, timing, quality and distribution of water to the Everglades, Florida Bay, Biscayne Bay, other eastern estuaries, and the Atlantic Ocean by:

a) supporting structural and operational modifications to the Central and Southern Flood Control Project and recommended by the US Army Corps of Engineers C&SF Feasibility Study;
b) supporting implementation of East Coast Buffer Plan; and
c) supporting a water supply plan that meets the needs of the natural system.

3.9.5 Conserve water entering the Everglades system and increase the self sufficiency of urban and agricultural water supplies by:

a) creating water storage areas near or within urban areas;
b) promoting increased efficiency of water use in agriculture, business uses and residential use; and
c) promoting the development of alternative water supply sources.

3.9.6 Restore water quality throughout the system by:

a) requiring stormwater treatment and storage areas for existing and newly developed areas and agricultural lands; and
b) protecting existing wetlands, native uplands and identified aquifer recharge areas.

3.9.7 Include the Everglades system in the ecological studies so that the successes of restoration may be expanded and included in adaptive management of the system.

Thank you for the opportunity to comment. If you require further information, please contact me.

Sincerely,

John E. Hulsey, AICP
Senior Planner

JEH/cp

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045 • TDD (561) 697-2574
Mailing Address: P.O. Box 24680, West Palm Beach, FL 33416-4680 • www.sfwmd.gov

PRO SWIM-LO RF 99699R

October 6, 1999

Mr. James C. Duck
Chief, Planning Division
Jacksonville District
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

Dear Mr. Duck:

Please find enclosed the consolidated comments of staff at the South Florida Water Management District regarding the Draft Environmental Impact Statement for the Herbert Hoover Dike Major Rehabilitation Evaluation Report.

Thank you for the opportunity to comment. Please call me if I can be of further assistance.

Sincerely,

Lewis Hornung

Lewis Hornung
Lake Okeechobee Restoration Program Manager

LH:dju
Enclosure

Herbert Hoover Dike Major Rehabilitation Evaluation Report
Draft Environmental Impact Statement

South Florida Water Management Districts Comments

General Comments

Evaluation of Alternatives

The Draft Environmental Impact Statement does not address the following:

- Why the Herbert Hoover Dike was segmented into reaches and what criteria were used;
- How was reach 1 selected as the first priority;
- What is the risk associated with rehabilitation of reach 1 vs the remaining reaches; and
- If reach 1 is rehabilitated, what is the risk of failure of another portion of the dike?

As a result, the impacts of the No Action Alternative are not equally compared with the other alternatives. It is assumed that a failure will occur in reach 1 in the No Action Plan. However, there is a risk that failure may occur in another reach with the No Action Alternative or the other alternatives.

Alternatives 1 through 3 do not eliminate the possibility of dike failure; it only reduces the risk of failure. It is this reduction in risk for Alternatives 1 through 3 that should be compared with the risk of failure associated with the No Action Alternative.

Selection of Alternatives

Other than the No Action Alternative, there are no non-structural alternatives considered. Operational alternatives should be addressed in the evaluation.

Implementing one of the three alternatives alone may not optimize benefits. Each alternative is applicable in different areas. Therefore, a combination of three alternatives should be considered.

Alternative 3

The main disadvantage of implementing Alternative 3 will be in its high cost of maintenance. The relief drain must be kept clear and open at all times since this will be the main relief conduit for the water seeping through the levee. Selection of a geotextile that will allow the free flow of water into the relief pipe is critical to this alternative. Since the lithology varies significantly along the reach, clogging of the geotextile or the perforated culvert is anticipated which may lead to a saturation of soils around the trench leading to piping or excessive seepage. This alternative may be implemented in areas

with a uniform lithology and along areas where the local drainage district and farms depend heavily on seepages for their watering needs.

Alternative 2

Alternative 2 with modifications may be implemented for the bulk of the reach in areas where the other alternatives are not suitable. No significant alteration of the groundwater regime in the adjacent areas is anticipated under this scenario. Groundwater seepages under the cutoff wall and the rim canals will keep the water table in the adjacent landward areas sufficiently saturated for irrigation. During high water levels in the lake, the cutoff trench will intercept the groundwater table and retain the floodwaters within the confines of the diked area. The cutoff wall need not be 60 feet deep and may be terminated 5 feet below the most permeable horizon (depth around 40 feet). The depth of the cutoff wall may vary locally which can be determined after a detailed geotechnical investigation. The 3-feet thick cutoff trench may be filled with an admixture of locally available muck and bentonite. The existing seepage ditch may be relocated further landward of the stability berm. The seepage ditch will trap any surface runoff. The material excavated from the cutoff trench may be used for the construction of stability berm. This alternative will provide protection with a low construction and maintenance cost.

Alternative 1

Alternative 1, which involves the improvement of the existing drainage ditches and construction of stability berm, may be implemented where ROW is limited. Application of this alternative will be limited.

Specific Comments:

1. P 3, para 1: Is there "...continued degradation of the HHD's stability..."? If so, there should be a discussion of what is happening and its potential implications.
2. P5, para 3.00: While the sentence immediately before this paragraph states that the repairs and modifications are authorized by the Flood Control Act of 1948, will the requirements of local cooperation be based on the same authorization?
3. p. 12, para 2: Recommend replacing the Fernald and Patton citation with a more recent one, which would reflect the most recent lake regulation schedule. You could cite the 1997 SWIM Plan Update or perhaps, the WSE DEIS, if you feel comfortable with that.
4. p.14, para 3: It is not clear how flooding of perimeter wetlands amounts to a primary source of nutrients; advection of high nutrient water from the open water to the littoral zone is a redistribution of existing nutrients, not a new source. Instead, include atmospheric inputs via precipitation as an additional source. Unfortunately, we still do not have good data quantifying the relative magnitude of this source. Also, there is a typographic problem in the apparent bridge between this paragraph and the next one.

5. p. 14, para 5: Disagree that the water in LO is essentially uniform in chemical composition. There are considerable differences in chemistry even within different regions of the open water, and certainly between waters in the open water and littoral zones. For an overview, recommend looking at the following paper:

   Steinman, A.D., K.E., Havens, N.G. Aumen, R.T. James, K.-R. Jin, J. Zhang, and B. Rosen. 1999. Phosphorus in Lake Okeechobee: sources, sinks, and strategies. Pages 527-544 in: K.R. Reddy, G.A. O'Connor, and C.L. Schelske (editors). Phosphorus Biogeochemistry of Subtropical Ecosystems: Florida as a case example. CRC/Lewis Publ., New York.

6. p. 15, para 2: This paragraph suggests that water levels can be controlled between 17.5 and 15.5 ft, NGVD. However, this is not true. Suggest a broader discussion of actual water level ranges that can be expected with the current and WSE regulation schedules.
7. P. 16, para 4: the term "duration" is used where the term "return frequency" should be used and vise versa
8. p. 19, para 2: change "Vallioneria" to "Vallisneria". Also, suggest steering clear of the term "diverse" to describe these marshes, unless you want to get into a discussion of what diverse means. The marshes in LO actually were not very diverse, at least prior to human impact. Whatever diversity they have obtained recently is a perversion due to invasive species; it is doubtful that this is how we want to increase diversity.
9. p. 21, para 4: The latin species name for the Florida apple snail is unfamiliar, and not consistent with the one used by SFWMD (*Pomacea paludosa*).
10. p. 24: Given that there is now an alligator hunting season (permits given by lottery only), parts of this section seem incongruous. Perhaps this should be rewritten?
11. p. 26, para 2: The basis for the statement that wood storks are excellent indicators of wetland health when the habitat is not clear. They are frequently found in south Florida on golf courses.
12. P. 50, para 2: It is not clear what types of water quality issues might be perceived.
13. p. 52, para 1: If a breach were to occur, and massive discharges ensued, it is likely that the fluid mud sediments near the center of the lake would be laterally transported to the near shore region close to the breach. This would result in elevated TSS, as well as elevated TP concentrations, near this region, as well.
14. P. 52, para 1: It is true that a breach of the dike is likely to be preceded by significant freshwater discharges to the estuaries with the No Action Alternative. However, this is equally true for the other alternatives. Discharges to the estuaries are determined by the regulation schedule, which is common to all alternatives.
15. P. 73, para 6: Although the impacts of failures might be contained in separate watersheds, the risk of failure changes as each reach is rehabilitated. For example, rehabilitation of reach 1 may actually increase the risk of a failure in another reach.
16. P. 73, para 6: The impacts of the proposed regulation schedule WSE should be assessed. Also, the impacts of implementation of Restudy Comprehensive Plan components that will attenuate inflows to the lake must also be considered in the cumulative effects section

STATE OF FLORIDA

DEPARTMENT OF COMMUNITY AFFAIRS

"Helping Floridians create safe, vibrant, sustainable communities"

JEB BUSH
Governor

STEVEN M. SEIBERT
Secretary

October 8, 1999

Mr. Mark Ziminske
Department of the Army
Jacksonville District Corps of Engineers
Post Office Box 4970
Jacksonville, Florida 32232-0019

RE: Department of the Army - Jacksonville District Corps of Engineers - Draft Environmental Impact Statement - The Herbert Hoover Dike - Major Rehabilitation Evaluation Report - Lake Okeechobee, Florida
SAI: FL9501030002CR

Dear Mr. Ziminske:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the above-referenced project.

The Department of Environmental Protection (DEP) notes that Alternative 3, the Corps' preferred alternative, is also the environmentally preferred alternative. Avoidance of impacts to mitigation will reduce anticipated impacts to wetlands, listed wildlife species or water quality. The project will require a water quality certification under Chapter 373, Florida Statutes, and Section 401 of the Clean Water Act. The Corps should coordinate with the DEP's Federal Liaison regarding permitting requirements. Please refer to the enclosed DEP comments.

The Department of Transportation (DOT) notes that the project may impact the development of the Lake Okeechobee Segment of the Florida National Scenic Trail. The DOT is participating with other agencies in the joint development of the Trail. The DOT recommends that the Corps coordinate with the DOT and the DEP

2555 SHUMARD OAK BOULEVARD • TALLAHASSEE, FLORIDA 32399-2100
Phone: (850) 488-8466/Suncom 278-8466 FAX: (850) 921-0781/Suncom 291-0781
Internet address: http://www.state.fl.us/comaff/

FLORIDA KEYS
Area of Critical State Concern Field Office
2796 Overseas Highway, Suite 212
Marathon, Florida 33050-2227

GREEN SWAMP
Area of Critical State Concern Field Office
205 East Main Street, Suite 104
Bartow, Florida 33830-4641

on the implementation of the Lake Okeechobee Scenic Trail Master Plan. In addition, efforts should be taken to avoid restricting access to the Dike from proposed trailheads. Please refer to the enclosed DOT comments.

The Department of State (DOS) notes that the Herbert Hoover Dike (8PB2028) is eligible for listing in the National Register of Historic Places. The DOS notes that Alternative No. 3 has been selected as the preferred alternative. It is the opinion of the DOS that the proposed project activities associated with Alternative No. 3 will have no adverse impact on the historic character of the Herbert Hoover dike. Please refer to the enclosed DOS comments.

Based on the information contained in the draft environmental impact statement and the enclosed comments provided by our reviewing agencies, the state has determined that the above-referenced project is consistent with the Florida Coastal Management Program.

In addition, the Treasure Coast and Southwest Florida Regional Planning Councils have identified the policies and goals of their Strategic Regional Policy Plans which may apply to the proposed activity. The comments provided by the regional planning councils are enclosed for your review and consideration.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Ms. Cherie Trainor, Clearinghouse Coordinator, at (850) 922-5438.

Sincerely,

Chris McCay

for Ralph Cantral, Executive Director
Florida Coastal Management Program

RC/cc
Enclosures
cc: Robert Hall, Department of Environmental Protection
George Percy, Department of State
Gustavo Schmidt, Department of Transportation
Wayne Daltry, Southwest Florida Regional Planning Council
Liz Gulick, Treasure Coast Regional Planning Council

COUNTY: State

Message:

DATE: 07/28/1999
COMMENTS DUE-2 WKS: 08/12/1999
CLEARANCE DUE DATE: 09/24/1999
SAI#: FL950103000?CR

STATE AGENCIES	WATER MANAGEMENT DISTRICTS	OPB POLICY UNITS
X Agriculture Community Affairs Environmental Protection Fish & Wildlife Conserv. Comm State Transportation	South Florida WMD	Environmental Policy/C & ED

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evalutation and is categorized as one of the following:

___ Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.

_X_ Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.

___ Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.

___ Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

Project Description:

Department of the Army - Jacksonville District Corps of Engineers - Draft Environmental Impact Statement - The Herbert Hoover Dike - Major Rehabilitation Evaluation Report - Lake Okeechobee, Florida. Also available on the web at: http://www/saj.usace.army.mil/pd/env-doc.htm

To: **Florida State Clearinghouse**
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
(850) 922-5438 (SC 292-5438)
(850) 414-0479 (FAX)

EO. 12372/NEPA
☐ No Comment
☐ Comments Attached
☐ Not Applicable

Federal Consistency
☒ No Comment/Consistent
☐ Consistent/Comments Attached
☐ Inconsistent/Comments Attached
☐ Not Applicable

REFERRED TO JAMES B. RATH, MANAGER, OKEECHOBEE DISTRICT FOR HIS COMMENTS. (941) 462-5160

From:
Division of Forestry
Forest Resource Planning
& Support Services Bureau
3125 Conner Blvd., Mail Stop C23
Tallahassee, FL 32399-1650

Division/Bureau: _____

Reviewer: _____

Date: 8-12-99

Department of Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

September 24, 1999

Ms. Cherie Trainor
Florida State Clearinghouse
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

Re: Department of the Army, Jacksonville District Corps of Engineers, Draft Environmental Impact Statement, The Herbert Hoover Dike, Major Rehabilitation Evaluation Report, Lake Okeechobee, Florida

SAI: FL9501030002CR

Dear Ms. Trainor:

This Department has reviewed the above-described project proposal and we offer the following comments.

The Corps preferred alternative, alternative 3, consists of the installation of a seepage berm with relief trench along the landward toe of the embankment along Reach One of the Herbert Hoover Dike. Reach one is approximately 22.4 miles long and located along the southeast area of the Lake from the St. Lucie Canal at Port Mayaca, south to the Hillsboro Canal at Belle Glade. The purpose of the seepage berm and trench is to eliminate the ongoing degradation and instability of the dike from seeping and piping flows.

Alternative 3 is also the environmentally preferred alternative as its environmental consequences are expected to be minimal. Avoidance of impacts or mitigation will reduce anticipated impacts to wetlands, listed wildlife species or water quality.

The project will require a water quality certification under Chapter 373, F.S. and Section 401 of the Clean Water Act. The Corps should coordinate with the Department's Federal Liaison, Mr. Eric Bush concerning permit application requirements. Mr. Bush can be reached in Jacksonville at 904/232-3410.

Thank you for the opportunity of commenting on this proposal. If you have any questions regarding this letter please give me a call at 904/487-2231.

Sincerely,

Robert W. Hall
Office of Intergovernmental Programs

Cc: Eric Bush
John Outland

CO State

RECEIVED AUG 06 1999

Mess ge:

DATE: 07/28/1999
COMMENTS DUE-2 WKS: 08/12/1999
CLEARANCE DUE DATE: 09/24/1999
SAI#: FL9501030002CR

STATE AGENCIES	WATER MANAGEMENT DISTRICTS	OPB POLICY UNITS
Agriculture Community Affairs Environmental Protection X Fish & Wildlife Conserv. Comm State Transportation	South Florida WMD	Environmental Policy/C & ED

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AUG 13 1999
State of Florida Clearinghouse

RECEIVED BY GFC
AUG 11 1999
OFFICE OF ENVIRONMENTAL SERVICES

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evalutation and is categorized as one of the following:

— Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.

_X_ Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.

— Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.

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Project Description:

Department of the Army - Jacksonville District Corps of Engineers - Draft Environmental Impact Statement - The Herbert Hoover Dike - Major Rehabilitation Evaluation Report - Lake Okeechobee, Florida. Also available on the web at:
http://www/saj.usace.army.mil/pd/env-doc.htm

To: Florida State Clearinghouse
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
(850) 922-5438 (SC 292-5438)
(850) 414-0479 (FAX)

EO. 12372/NEPA

☐ No Comment
☐ Comments Attached
☐ Not Applicable

Federal Consistency

☒ No Comment/Consistent
☐ Consistent/Comments Attached
☐ Inconsistent/Comments Attached
☐ Not Applicable

From:

Division/Bureau: Office of Environmental Services
Reviewer: Mary Ann Poole
Date: Aug. 6, 1999

DIVISIONS OF FLORIDA DEPARTMENT OF STATE
Office of the Secretary
Office of International Relations
Division of Elections
Division of Corporations
Division of Cultural Affairs
Division of Historical Resources
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Department of Veterans' Affairs

FLORIDA DEPARTMENT OF STATE
Katherine Harris
Secretary of State

DIVISION OF HISTORICAL RESOURCES

Ms. Cherie Trainor
State Clearinghouse
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

August 20, 1999

RE: DHR Project File No. 995631
Cultural Resource Assessment Request
SAI# FL9501030002CR
Draft Environmental Impact Statement for the Herbert Hoover Dike
Major Rehabilitation Evaluation Report

Dear Ms. Trainor:

In accordance with the provisions of Florida's Coastal Zone Management Act and Chapter 267, *Florida Statutes*, as well as the procedures contained in 36 C.F.R., Part 800 ("Protection of Historic Properties"), we have reviewed the referenced project for possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places*, or otherwise of historical or architectural value.

We have reviewed the referenced draft environmental impact statement and note that the Herbert Hoover Dike (8PB2028) is eligible for listing in the National Register. We specifically reviewed sections 4.18 and 5.18, both dealing with Cultural Resources. We note that Alternative No. 3, which involves the installation of a seepage berm with relief trench along the leeward toe of the embankment, was selected as the preferred alternative. Therefore, it is the opinion of this office that the proposed project activities associated with Alternative No. 3 will have no adverse effect on the historic character of the Herbert Hoover Dike. The project is also consistent with the historic preservation laws of Florida's Coastal Management Program.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservation Planner, at 850-487-2333 or 800-847-7278. Your interest in protecting Florida's historic properties is appreciated.

Sincerely,

Laura A. Kammerer

for George W. Percy, Director
Division of Historical Resources and
State Historic Preservation Officer

GWP/Ese

xc: Jasmin Raffington, FCMP-DCA

Florida Department of Transportation

JEB BUSH
GOVERNOR

TRANSPORTATION PLANNING OFFICE - DISTRICT 4
3400 West Commercial Blvd., 3rd Floor, Ft. Lauderdale, FL 33309-3421
Telephone: (954) 777-4601; Fax: (954) 777-4671

THOMAS F. BARRY, JR.
SECRETARY

August 23, 1999

Ms. Cherie Trainor, Coordinator
Florida State Clearinghouse
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, FL. 32399-2100

Dear Ms. Trainor:

SUBJECT: **SAI# FL 9501030002CR**
Herbert Hoover Dike Major Rehabilitation Evaluation Report

In response to the Intergovernmental Coordination and Review request for comments or objections, the Department has the following comments concerning the Herbert Hoover Dike Major Rehabilitation Evaluation Report Draft Environmental Impact Statement.

A review of the Study indicates that the project possibly could have some impacts on the development of the Lake Okeechobee Segment of the Florida National Scenic Trail. The Florida Department of Transportation is participating with other agencies in the joint development of the Trail. The Department's project number is 2313401. The Department recommends that the U.S. Army Corps of Engineers coordinate with us and the Florida Department of Environmental Protection on the implementation of the Lake Okeechobee Scenic Trail Master Plan. Additionally, efforts should be taken to avoid restricting access to the Dike from proposed trailheads.

The applicant should contact either Mr. Kent Rice or Mr. Scott Seeburger at (954) 777-4601 to coordinate with the Department regarding matters pertaining to the Lake Okeechobee Scenic Trail.

If you have any other questions, please contact this office.

Sincerely,

Gustavo Schmidt, P.E.
District Planning Manager

GS:lh

Attachment

cc: Sandra Whitmire
James Scully
Scott Seeburger
Kent Rice
Anna Gannon

File:: 4280.05

FLORIDA STATE CLEARINGHOUSE
RPC INTERGOVERNMENTAL COORDINATION AND RESPONSE SHEET

CB-02

SAI #: FL9501030002CR DATE: 07/28/1999

COMMENTS DUE TO CLEARINGHOUSE: 08/27/1999

AREA OF PROPOSED ACTIVITY: COUNTY: State

☐ FEDERAL ASSISTANCE ☒ DIRECT FEDERAL ACTIVITY ☐ FEDERAL LICENSE OR PERMIT ☐ OCS

PROJECT DESCRIPTION

Department of the Army - Jacksonville District Corps of Engineers - Draft Environmental Impact Statement - The Herbert Hoover Dike - Major Rehabilitation Evaluation Report - Lake Okeechobee, Florida. Also available on the web at: http://www/saj.usace.army.mil/pd/env-doc.htm

ROUTING:

RPC

X Treasure Coast RPC
SW Florida RPC
Central FL RPC

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TREASURE COAST
REGIONAL PLANNING COUNCIL

PLEASE CHECK ALL THE LOCAL GOVERNMENTS BELOW FROM WHICH COMMENTS HAVE BEEN RECEIVED; ALL COMMENTS RECEIVED SHOULD BE INCLUDED IN THE RPC'S CLEARINGHOUSE RESPONSE PACKAGE. IF NO COMMENTS WERE RECEIVED, PLEASE CHECK "NO COMMENT" BOX AND RETURN TO CLEARINGHOUSE.

COMMENTS DUE TO RPC: **08/18/1999**

NO COMMENTS: X

(IF THE RPC DOES NOT RECEIVE COMMENTS BY THE DEADLINE DATE, THE RPC SHOULD CONTACT THE LOCAL GOVERNMENT TO DETERMINE THE STATUS OF THE PROJECT REVIEW PRIOR TO FORWARDING THE RESPONSE PACKAGE TO THE CLEARINGHOUSE.)

NOTES:

ALL CONCERNS OR COMMENTS REGARDING THE ATTACHED PROJECT (INCLUDING ANY RPC COMMENTS) SHOULD BE SENT IN WRITING BY THE DUE DATE TO THE CLEARINGHOUSE. PLEASE ATTACH THIS RESPONSE FORM AND REFER TO THE SAI # IN ALL CORESPONDENCE.

IF YOU HAVE ANY QUESTIONS REGARDING THE ATTACHED PROJECT, PLEASE CONTACT THE STATE CLEARINGHOUSE AT (904) 922-5438 OR SUNCOM 272-5438.

99-337

FLOR)A STATE CLEARINGHC SE
RPC INTERGOVERNMENTAL COORDINATION AND RESPONSE SHEET

SAI #: FL9501030002CR DATE: 07/28/1999

COMMENTS DUE TO CLEARINGHOUSE: 08/27/1999

AREA OF PROPOSED ACTIVITY: COUNTY: State

☐ FEDERAL ASSISTANCE ☒ DIRECT FEDERAL ACTIVITY ☐ FEDERAL LICENSE OR PERMIT ☐ OCS

PROJECT DESCRIPTION

Department of the Army - Jacksonville District Corps of Engineers - Draft Environmental Impact Statement - The Herbert Hoover Dike - Major Rehabilitation Evaluation Report - Lake Okeechobee, Florida. Also available on the web at: http://www/saj.usace.army.mil/pd/env-doc.htm

ROUTING:

RPC

Treasure Coast RPC
X SW Florida RPC
Central FL RPC

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State of Florida Clearinghouse

PLEASE CHECK ALL THE LOCAL GOVERNMENTS BELOW FROM WHICH COMMENTS HAVE BEEN RECEIVED; ALL COMMENTS RECEIVED SHOULD BE INCLUDED IN THE RPC'S CLEARINGHOUSE RESPONSE PACKAGE. IF NO COMMENTS WERE RECEIVED, PLEASE CHECK "NO COMMENT" BOX AND RETURN TO CLEARINGHOUSE.

COMMENTS DUE TO RPC: **08/18/1999**

X **Glades County**

RECEIVED
AUG 5 1999
S.W. FLORIDA REGIONAL
PLANNING COUNCIL

NO COMMENTS: X

(IF THE RPC DOES NOT RECEIVE COMMENTS BY THE DEADLINE DATE, THE RPC SHOULD CONTACT THE LOCAL GOVERNMENT TO DETERMINE THE STATUS OF THE PROJECT REVIEW PRIOR TO FORWARDING THE RESPONSE PACKAGE TO THE CLEARINGHOUSE.)

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IF YOU HAVE ANY QUESTIONS REGARDING THE ATTACHED PROJECT, PLEASE CONTACT THE STATE CLEARINGHOUSE AT (904) 922-5438 OR SUNCOM 272-5438.

Southwest Florida Regional Planning Council

4980 Bayline Drive, 4th Floor, N. Ft. Myers, FL 33917-3909 (941) 656-7720

P.O. Box 3455, N. Ft. Myers, FL 33918-3455 SUNCOM 749-7720

FAX 941-656-7724

August 20, 1999

Mr. Mark Ziminske
USACOE - Jacksonville District
P.O. Box 4970
JACKSONVILLE, FL 32232-0019

RE: IC&R Project #99-337
State Clearinghouse #FL9501030002CR

USACOE - Jacksonville District - Draft EIS - The Herbert Hoover Dike - Major rehabilitation evaluation report - Lake Okeechobee, Florida.

Dear Mr. Ziminske:

The staff of the Southwest Florida Regional Planning Council reviews various proposals, Notifications of Intent, Preapplications, permit applications, and Environmental Impact Statements for compliance with regional goals, objectives, and policies, as determined by the Strategic Regional Policy Plan. The staff reviews such items in accordance with the Florida Intergovernmental Coordination and Review Process (Chapter 29I-5, F.A.C.), and adopted regional clearinghouse procedures.

These designations determine Council staff procedure in regards to the reviewed project. The four designations are:

Less Than Regionally Significant and Consistent no further review of the project can be expected from Council.

Less Than Regionally Significant and Inconsistent Council does not find the project of regional importance, but will note certain concerns as part of its continued monitoring for cumulative impact within the noted goal area.

Regionally Significant and Consistent project is of regional importance, and appears to be consistent with Regional goals, objectives, and policies.

Regionally Significant and Inconsistent project is of regional importance and does not appear to be consistent with Regional goals, objectives, and policies. Council will oppose the project as submitted, but is willing to participate in any efforts to modify the project to mitigate the concerns.

The above referenced document has been reviewed by this office, based on the information contained in the document, and on local knowledge, has been found **Regionally Significant and Consistent** with adopted goals, objectives, and policies of the Strategic Regional Policy Plan. Also, Regional staff supports the implementation of the Alternative 3 improvements to Reach 1.

Should you or any other party request this finding to be reconsidered, please contact Nichole L. Gwinnett, IC&R Coordinator, with this request, or any questions concerning staff review of this item. This recommendation will be discussed at the next scheduled Council meeting. Should Council action differ from the staff recommendation, you will be notified.

Sincerely,

SOUTHWEST FLORIDA REGIONAL PLANNING COUNCIL

for Wayne E. Daltry
Executive Director

WED/NLG

cc: Cherie Trainor, Florida State Clearinghouse

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

AUG 30 1999

District Engineer, Jacksonville
P.O. Box 4970
Jacksonville, FL 32232

ATTN.: Mr. Mark Ziminske
Planning Division

Subject: Draft Environmental Impact Statement (EIS) for Herbert Hoover Dike (HHD) Rehabilitation, Lake Okeechobee, Florida (CEQ # 99-02-71)

Dear Sir:

Pursuant to Section 309 of the Clean Air Act and Section 102 (2)(C) of the National Environmental Policy Act, EPA, Region 4 has reviewed the subject document, an evaluation of the consequences of restoring/upgrading the structural integrity of Reach #1 of the HHD (a 22-mile segment from St. Lucie Canal to the Hillsboro Canal). Recent episodes of piping and sand boils along this southeastern segment have created concerns that a major crevasse was possible in the absence of some significant renovations. While not specifically mentioned, we assume that similar problems exist elsewhere along the HHD system and will be the subject of subsequent NEPA documentation.

After deliberation of the practicable alternatives it was determined by the Jacksonville District (District) that the most environmentally sensitive means to effect this upgrade would involve the use of a seepage berm with relief trench coupled with a French drain along the landward toe of the embankment. Stabilization of the HHD is essential since Lake Okeechobee is central to the region's water supply needs and is a fundamental element of the Central and South Florida Restudy (CSFR). While it was not noted as a planning objective in the EIS, this and any remaining structural upgrades to the HHD should be consistent with the overall formulations associated with the CSFR.

From the information provided, it appears that the proposed design option will meet the primary project objective, viz., preventing a catastrophic dike failure within Reach #1. Moreover, with some minor modifications developed during the detailed design phase, the noted structural components can be installed with acceptable adverse environmental consequences and operational efficiencies. Our specific comments in this regard are attached. On the basis of our review a rating of EC-2 has been assigned. That is, while the environmental ramifications of this action have been generally minimized, certain design changes will be necessary as planning continues to improve the project further.

Thank you for the opportunity to comment on this action. If we can be of further assistance, Dr. Gerald Miller (404-562-9626) will serve as initial point of contact.

Sincerely,

Heinz Mueller

Heinz J. Mueller, Chief
Office of Environmental Assessment
Environmental Accountability Division

Attachment

Detailed Comments

According to the text, unavoidable construction impacts (direct/indirect) will adversely affect some important recreational and infrastructure features in the project area. While the final design will make all practicable efforts to minimize these perturbations, there should be some consideration given to compensation for the infrastructure losses experienced by the local public in the immediate project area. For example, there could be some cost sharing on those roads requiring accelerated maintenance as a result of the dramatic increase in heavy truck traffic, replacement fishing access could be provided for those areas lost to construction rights-of-way, and vegetation destroyed within public parks during the initial work could be replanted with a mix of the species lost.

It was noted that flexible fencing and/or hay "may" be used to control erosion during initial construction, especially peat removal activities. Controlling erosion along the seepage berm and associated structures will not be as easy/definitively accomplished as implied in the text. Notwithstanding specific contract stipulations, it has been our experience that installation and especially maintenance of the "best management practices" (BMP) to control erosion on these type projects often prove illusive to achieve. The reason(s) why this occurs are important, but not as operative as the fact that additional remediation and attendant environmental perturbation are engendered when initial installation and subsequent maintenance are not performed. Constructing the upgrades during the driest part of the year has an obvious appeal, but should not be in lieu of more active measures to control surface water movement. The fate of the peat which will be excavated during the construction of the seepage berm should be noted.

We observe that fill will have to be transported to the abandoned rock quarry (vicinity of C-12) in order to support the drainage berm.. It would be helpful if the final document provided more details on the specifics of this design element. In this instance it appears that comprehensive sediment control is fundamental to long-term maintenance of dike integrity and by extension the expected degree of flood damage prevention.

By design seepage will move from the filter stone into the perforated culvert system and then empty via controlled outlets into the various canals which drain the Lake. While our staffs have discussed this matter, some additional

information in the final EIS about this water movement would be helpful to other reviewers in determining its effects. There will some control of seepage flows as water exits the culvert system (at the noted 8 points), but there were no specifics about these weirs/stop-log risers would be managed. Similarly, drop inlets will be used to preclude ponding on the landward side of the upgraded levee. It has been our experience that the protective grates over the drop openings are very prone to clogging, especially after mowing operations. Some information as to their maintenance should also be provided in the final document. For example, what criteria/standards will be used by the District or its agents in providing this control?

It was noted that during periods of concentrated rain and/or backpumping from adjacent agricultural fields the usual situation reverses and flows in the canal move toward the Lake in some portions (vicinity of C-12 and C-13) of Reach #1 rather than vice versa. When this occurs the seepage channel will not function as designed because of this differential head. Any loss of efficiency is important as this would seem to be exactly the times when the seepage canal would be most needed. We understand that this situation can be rectified via some rerouting of the culvert system. The final document should provide details on exactly how this will be accomplished.

There is a quarry (3000'x 10-20'x ?) within Reach #1 which may pose some problems in achieving/maintaining project objectives. It will have to be partially filled because there is insufficient space to construct the proposed drainage berm between its margins and the existing embankment toe of the levee . This fill must be carefully chosen to ensure that it has the proper structural/textural characteristics. Namely, it would need acceptable shrink-swell characteristics to nominalize the potential for failure of the culvert line at its joints. We are also concerned about the gross integrity of the fill on which the drainage berm will be placed. Unless there is essentially a water proof seal between the drain and the quarry, this fill would be subject to excessive wetting which could foster slumping. This could be true notwithstanding the rock-filled gabions placed on the margins of the project and the quarry and the premise that water levels in the quarry will always remain lower than the elevation of the culvert system. Unless this seal is maintained over the life of the project and quarry drains remain open, the water level in the quarry could approximate that in the drain and lessen its efficacy at exactly the time (rain fall periods) that it must have maximum utility in maintaining HH dike integrity. In a related matter, if the quarry will

only be partially filled, there would appear to be the opportunity to construct a shallow littoral zone to provide wildlife and water quality functions. We would strongly support adding this feature to the project.

Perennial vegetation must be scrupulously prevented from growing on the elevated berm to preclude root penetration/clogging of the perforated drainage (culvert) line. The current practice of regular mowing will accomplish this end, but care will have to be taken that the weight of the equipment does not adversely affect the efficacy of the drainage system by compaction and/or tearing the geotextile fabric which surrounds the culvert.

While the analysis of upgrading HHD is on-going, this would be an excellent opportunity to compare the overall water quality ramifications of agriculture waterward of the dike versus the economic benefits of this land use. This determination would not be of just academic interest given the need to reduce nutrient outputs from the water exiting the Lake to the south to meet regulatory requirements.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

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9721 Executive Center Drive North
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(727) 570-5312; FAX 570-5517

JUL 29 1999

F/SER3:BH

Mr. James C. Duck
Jacksonville District Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

Dear Mr. Duck:

This is in response to your request for comments on the draft environmental impact statement (DEIS) on the Herbert Hoover Dike Major Rehabilitation Evaluation Report received in our office on July 26, 1999. This project will make repairs to the first of eight segments or "reaches" of the Herbert Hoover Dike (HHD) on Lake Okeechobee in southern Florida. The HHD was constructed in 1915 to provide flood protection and irrigation. Improvements were made in the 1930's, 1940's and 1970's. The U. S. Army Corps of Engineers (COE) evaluated four alternatives for the repair of reach one. The preferred alternative will include the installation of a seepage berm with a relief trench along the lower portion of the landward toe of the embankment.

All of the proposed construction activities will take place in habitat that does not contain species protected by the Endangered Species Act (ESA) under National Marine Fisheries Service (NMFS) purview; therefore, the proposed construction activities are not likely to adversely affect NMFS protected species. However, the use of this system may affect downstream water quality. Johnson's seagrass (*Halophila johnsonii*), a threatened species under the ESA, can be found downstream from the St. Lucie Canal in the St. Lucie Estuary. Therefore, any fluctuations in the freshwater flow into the canal caused by this project may have an effect on the water quality of the estuary which may affect Johnson's seagrass. The DEIS does not sufficiently explain the effects the seepage berms will have on downstream water quality; therefore, NMFS can not make a determination on this project's effects on Johnson's seagrass. NMFS suggests that the final EIS better analyze the effects on downstream water quality.

If you have any questions, please call Bob Hoffman, Fishery Biologist.

Sincerely yours,

Charles A. Oravetz

Charles A. Oravetz
Assistant Regional Administrator
Protected Resources Division

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SEP 16 1999 F/SER3:BH

Mr. James C. Duck
Jacksonville District Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

Dear Mr. Duck:

This responds to your September 10, 1999 letter relaying additional information requested by the National Marine Fisheries Service (NMFS) in a letter dated July 29, 1999 on the Herbert Hoover Dike Major Rehabilitation Evaluation Study. The NMFS July 29, 1999 letter requested additional information regarding the construction of the seepage berm and relief trench along the lower portion of the landward toe of the Herbert Hoover Dike embankment on Lake Okeechobee in southern Florida. This information was requested so NMFS could evaluated this project's potential for adverse impacts to Johnson's seagrass located down stream in the St. Lucie Estuary.

The information in your letter states that to minimize temporary water quality impacts due to construction, all Corps of Engineers contractors will follow a rigorous environmental protection plan. This plan will require the use of various erosion control measures. Based on this information, NMFS concurs with your conclusion that this project is not likely to affect species protected by the Endangered Species Act under NMFS purview.

This concludes Jacksonville District's consultation responsibilities under section 7 of the ESA for the construction of the Herbert Hoover Dike Major Rehabilitation Evaluation Study for species under NMFS purview. Consultation should be reinitiated if new information reveals impacts of the identified activity that may affect listed species or their critical habitat, a new species is listed, the identified activity is subsequently modified or critical habitat determined that may be affected by the proposed activity.

Sincerely yours,

William T. Hogarth, Ph.D.
Regional Administrator

United States Department of the Interior

OFFICE OF THE SECRETARY
OFFICE OF ENVIRONMENTAL POLICY AND COMPLIANCE
Richard B. Russell Federal Building
75 Spring Street, S.W.
Atlanta, Georgia 30303

September 16, 1999

ER-99/651

Mr. Mark Ziminske
U. S Army Corps of Engineers
Jacksonville District, Planning Division
P. O. Box 4970 - PD-ES
Jacksonville, FL 32232-0019

Dear Mr. Ziminske:

The Department of the Interior has reviewed the draft EIS for the Herbert Hoover Dike Major Rehabilitation Evaluation Study, FL, as requested.

The Draft EIS is inconsistent in its evaluation of the impact of the project on wetlands along the existing toe ditch on the landward side of the Herbert Hoover Dike (HHD). In some portions of the document, the Corps states they provide habitat for small fishes and invertebrates and the toe ditches are used by foraging wading birds (Section 4.09, Page DEIS-19; Section 5.09, Page DEIS-55). Not only does the Corps acknowledge this habitat value, but states on Page DEIS-55 that "impacts would be relatively significant." In contrast, other portions of the document, state that for these same wetlands, "impacts to fish and wildlife would be minimal" (Section 5.10, Page DEIS-56); or that impacts are "not significant in extent" (Section 5.21, Page DEIS-75).

The Fish and Wildlife Service's (Service) draft Fish and Wildlife Coordination Act (FWCA) report found that the cumulative habitat value of this linear wetland, particularly when considering the 22.4-mile length of Reach 1 of the HHD, was significant. The FWCA report found that compensatory wetland mitigation should be included in the project design and recommended that a littoral shelf be provided along existing quarries as the preferred form of mitigation. On Page DEIS-78, the Corps states that gabions will be installed in that area instead of the Service's proposed littoral shelf. If the Corps is unable to follow the Service's specific recommendation as to the design of the compensatory wetland mitigation, the Service continues to recommend that an alternate mitigation proposal should be included in the project plans.

The Service is unable to agree with the Corps' finding on Page DEIS-78 that the proposed collector canal will compensate fully for loss of the wetlands functions and values of the existing toe ditch. The draft EIS does not provide an adequate accounting of the extent of wetland impact, a functional assessment of the existing wetlands, nor an assessment of the functions and values anticipated with

the proposed collector canal. The Service recommends use of the Wetland Rapid Assessment Procedure (WRAP) to perform such an evaluation prior to detailed design of the project. The Service offers its assistance in establishing the WRAP assessment team and participating in the field inspections. An element in the WRAP's functional assessment of the future with project condition should include a commitment by the Corps to maintain the proposed collector canal free of exotic vegetation. The Service continues to recommend this as an element in any proposed compensatory mitigation, despite the Corps' statement on Page DEIS-78 that such a recommendation "is not applicable."

Specific Comment

The only estimate of the impact of the project on wetlands appears on Page 3 of Draft Annex C, the Section 404 (b)(1) evaluation. That document estimates that 7 acres of "low quality remnant wetlands" and 10-15 acres of toe ditches will be filled. The body of the EIS should provide an accounting of the area and a functional assessment of the wetlands to be affected to support this statement. The proposed WRAP assessment would provide a more supportable estimate of both the quantity and quality of the wetlands to be affected.

Thank you for the opportunity to provide comments on this draft EIS. If you have questions regarding the fish and wildlife comments, please contact Bruce Bell at 404/679-7089.

Sincerely,

James H. Lee
Regional Environmental Officer

CC: FWS-ES, BBell, Atlanta
OEPC, WASHINGTON,DC